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JUDITH A. SZEPESEI
BLAKELY SOKOLOFF TAYLOR & ZAFMAN LLP
12400 WILSHIRE BOULEVARD
SEVENTH FLOOR
LOS ANGELES, CA 90025

EXAMINER

CHOUDHURY, AZIZUL Q

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/660,531	Applicant(s) GENSKE ET AL.	
	Examiner AZIZUL CHOUDHURY	Art Unit 2445	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 58-77 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 58-77 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

This office action is in response to the correspondence received on July 29, 2008.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 58-62, 64-67, 69-70 and 72-76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman (US Patent No: 6,704,824) in view of Elg (US Patent No: 6,694,354).

1. With regards to claim 58, Goodman teaches through Elg, a method of interaction between a client device and a host device to be performed when the client device is connected to the host device, the method comprising: establishing a bidirectional communication channel between the client device and the host device using a handshake command/response (*Goodman teaches a USB connection (bidirectional connection) between the computer and a peripheral device; see column 2, lines 11-17, Goodman. See Elg below for the handshake command/response*); negotiating a reliable stream protocol connection (*see Elg below*) between the client device and the host device, data for the reliable stream protocol connection to flow over the

bidirectional communication channel; probing the host device by the client device with a probe message to identify the type of host device (*Goodman's peripheral device first emulates being a known device and communicates with the host computer after being first connected to the peripheral wherein the host computer then configures itself letting the peripheral control the host computer via commands specific to its particular OS (It is implicit that since the peripheral knows which commands to use, that the host computer informs the peripheral of its traits. Hence this is deemed equivalent to the claimed probing to identify device type); see column 4, lines 18-46, Goodman*); identifying the host device type by the client device with a handshake response, the handshake response transmitted by the host device in response to receiving the probe message (*Since the peripheral knows which commands to use to control the host computer, it is implicit that that the host computer is identified to the peripheral. Hence this is deemed equivalent to the claimed identifying the host device; see column 4, lines 18-46, Goodman*); transmitting executable information selected according to an identity of the host device from the client device to the host device over the reliable stream protocol connection and receiving a file handle (*see Elg below*)) for the executable information at the host device (*Goodman's peripheral device sends a driver (executable) and executable commands to the host computer; see column 4, lines 37-61, Goodman*); invoking execution by the client of the executable information at the host device using the file handle (*see column 4,*

lines 2-3, Goodman); and entering a listening mode to receive a message sent by the executable information executing at the host device (Goodman's peripheral device can send and execute a bootstrap program in the host computer. After executing the bootstrap program, the peripheral waits for the host computer to retrieve data from it (equivalent to the claimed listening mode); see column 5, lines 15-31, Goodman)

While Goodman's disclosure teaches the claimed bidirectional communication channel it does not explicitly cite that the channel is established via handshaking protocol, the negotiating of reliable streams and the claimed use of file handles. In the same field of endeavor, Elg also teaches a device driver delivery system. Within the Elg's disclosure, it is taught how driver delivery systems can use USB connections (equivalent to the claimed bidirectional communication channel); see column 5, line 42, Elg. In addition, Elg teaches how the connection between the client and the host is established via protocols such as TCP (equivalent to the claimed handshaking protocol and TCP is a reliable stream protocol); see column 5, line 40, Elg. Furthermore, Elg teaches how pointers are used to connect between peripheral devices and host devices; see column 2, lines 45-50, Elg. Plus, Elg also teaches how the host computer sends device type information to the driver source, wherein the driver source can be the peripheral itself; see column 4, lines 13-15 and column 5, lines 16-20, Elg. The use of reliable data streams for delivering drivers ensures that the driver is delivered with

less chance of error. Therefore it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Goodman with those of Elg, to provide a reliable data stream (TCP) between host computers and peripheral devices (see column 5, lines 23-27, Elg).

2. With regards to claim 59, Goodman teaches through Elg, the method wherein the executable information comprises a device driver file (*see column 2, lines 30-32, Goodman*)
3. With regards to claim 60, Goodman teaches through Elg, the method wherein the device driver file, upon execution, controls interaction between the client device and the host device (*see column 4, lines 37-61, Goodman*).
4. With regards to claim 61, Goodman teaches through Elg, the method wherein the client device comprises a digital camera (*see column 5, lines 56-58, Elg*).
5. With regards to claim 62, Goodman teaches through Elg, the method wherein the reliable stream protocol connection is: a Transmission Control Protocol/Internet Protocol ("TCP/IP") connection between the client device and the host device (*see column 5, line 40, Elg*).

6. With regards to claim 64, Goodman teaches through Elg, the method wherein the client device comprises a digital camera device and wherein said method further comprises: upon execution of said executable information at said host device, transferring image information from said digital camera device to said host device (*Goodman's peripheral device is able to transfer any data to the host computer and can even be seen to the host computer to be a readable CD-ROM (It is well known that CD-ROMs can store pictures); see column 5, lines 23-25, Goodman. In addition, Elg teaches how cameras are acceptable peripheral devices (column 5, lines 56-58, Elg).*
7. With regards to claim 65, Goodman teaches through Elg, the method further comprising: after transferring said image information from the digital camera device to the host device, the host device wirelessly transmitting the image information to a third device (*see column 2, lines 64-65, Elg*).
8. With regards to claims 66 and 75, Goodman teaches through Elg, an apparatus comprising: a physical interface manager to detect when the apparatus is connected to a host, to probe the host in order to identify a type of host (*Upon detection of connection, Goodman's peripheral device first emulates being a known device and communicates with the host computer after being first connected wherein the host computer then configures itself letting the peripheral control the host computer via commands specific to its*

particular OS (It is implicit that since the peripheral knows which commands to use, that the host computer informs the peripheral of it's traits. Hence this is deemed equivalent to the claimed probing to identify device type); see column 4, lines 18-46, Goodman); a protocol manager to negotiate a reliable bidirectional data communication channel to the host; a driver uploader to identify the type of the host based on a handshake response received from the host in response to the host receiving the probe (As stated above, It is implicit that the peripheral knows the OS on the host computer, and Goodman teaches the peripheral uploading the driver to the host computer; see column 4, lines 37-46, Goodman), transmit a driver appropriate for the host type to the host over the reliable bidirectional data communication channel, receive a file handle for the driver at the host, and invoke the driver at the host using the file handle (see column 4, lines 37-46, Goodman); and a command server to respond to commands from the driver (see column 4, lines 47-61, Goodman).

While Goodman's disclosure teaches the claimed bidirectional communication channel it does not explicitly cite that the channel is established via handshaking protocol, the negotiating of reliable streams and the claimed use of file handles. In the same field of endeavor, Elg also teaches a device driver delivery system. Within the Elg's disclosure, it is taught how driver delivery systems can use USB connections (equivalent to the claimed bidirectional communication channel); see column 5, line 42, Elg.

In addition, Elg teaches how the connection between the client and the host is established via protocols such as TCP (equivalent to the claimed handshaking protocol and TCP is a reliable stream protocol); see column 5, line 40, Elg. Furthermore, Elg teaches how pointers are used to connect between peripheral devices and host devices; see column 2, lines 45-50, Elg. Plus, Elg also teaches how the host computer sends device type information to the driver source, wherein the driver source can be the peripheral itself; see column 4, lines 13-15 and column 5, lines 16-20, Elg. The use of reliable data streams for delivering drivers ensures that the driver is delivered with less chance of error. Therefore it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Goodman with those of Elg, to provide a reliable data stream (TCP) between host computers and peripheral devices (see column 5, lines 23-27, Elg).

9. With regards to claims 67 and 76, Goodman teaches through Elg, the apparatus wherein the protocol manager is to negotiate: a Transmission Control Protocol/Internet Protocol ("TCP/IP") protocol connection between the apparatus and the host (see column 5, line 40, Elg).
10. With regards to claim 69, Goodman teaches through Elg, the apparatus further comprising: a registry manager to store Transmission Control Protocol / Internet Protocol ("TCP/IP") configuration settings for communicating with

the host (*see column 5, line 40, Elg*).

11. With regards to claim 70, Goodman teaches through Elg, the apparatus further comprising: a file system to store the driver for transmission to the host (*Goodman teaches the driver being stored within the driver storage and even in the structure of a CD-ROM, both of which require file systems; see column 2, lines 58-59 and column 5, lines 23-25, Goodman*).

12. With regards to claim 72, Goodman teaches through Elg, the apparatus wherein the apparatus is a digital camera (*see column 5, lines 56-58, Elg*).

13. With regards to claim 73, Goodman teaches through Elg, the apparatus wherein the host is a cellular telephone (*see column 5, lines 56-58, Elg*).

14. With regards to claim 74, Goodman teaches through Elg, the apparatus wherein the driver uploader includes at least two drivers, the two drivers designed for different hosts (*Elg teaches the existence of multiple drivers; see Figure 8 and column 5, lines 15-27, Elg*).

Claims 63, 68, 71 and 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman (US Patent No: 6,704,824) in view of Elg (US Patent No: 6,694,354) and in further of what was well known in the art.

15. With regards to claim 63, Goodman teaches through Elg, the method wherein invoking execution comprises: instructing the host device to restart itself (*Goodman's peripheral device has the capability to enter any command through the Windows command prompt; See column 4, lines 47-50, Goodman. Examiner takes Official Notice (see MPEP 2144.03 Reliance on "Well Known" Prior Art) that restarting a computer by entering commands through the Windows command prompt was a well-known standard designed for the purpose of properly installing the driver*).

16. With regards to claim 68, Goodman teaches through Elg, the apparatus further comprising: an Extensible Markup Language ("XML") parser to package commands and data using XML syntax (*Goodman's disclosure teaches the driver being Windows compatible; see column 4, lines 37-46, Goodman. Examiner takes Official Notice (see MPEP 2144.03 Reliance on "Well Known" Prior Art) that writing drivers in XML was a well-known standard designed for the purpose of writing executable files in operating system compatible languages*).

17. With regards to claims 71 and 77, Goodman teaches through Elg, the apparatus wherein the driver is a Java program (*Goodman's disclosure teaches the driver being Windows compatible; see column 4, lines 37-46, Goodman. Examiner takes Official Notice (see MPEP 2144.03 Reliance on "Well Known" Prior Art) that writing drivers in Java was a well-known standard designed for the purpose of writing executable files in operating system compatible languages*).

18. The obviousness motivation applied to claims 58, 66 and 75 are applicable to their respective dependent claims.

Response to Arguments

Applicant's arguments with respect to claims 58-77 have been considered but are moot in view of the new ground(s) of rejection. In lieu of the latest claim amendments, a new search was performed and a new office action has been compiled. The new prior art Goodman teaches a USB connection (bidirectional connection) connecting the computer and a peripheral device; see column 2, lines 11-17, Goodman. The peripheral device first emulates being a known device and communicates with the host computer after being first connected wherein the host computer then configures itself letting the peripheral control the host computer via commands specific to its particular OS. It is implicit that since the peripheral knows which commands to use, that the host

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computer informs the peripheral of its traits. Hence this is deemed equivalent to the claimed probing to identify device type; see column 4, lines 18-46, Goodman. While Goodman's disclosure teaches the claimed bidirectional communication channel it does not explicitly cite that the channel is established via handshaking protocol. In the same field of endeavor, Elg also teaches a device driver delivery system. Within the Elg's disclosure, it is taught how driver delivery systems can use USB connections (equivalent to the claimed bidirectional communication channel); see column 5, line 42, Elg. In addition, Elg teaches how the connection between the client and the host is established via protocols such as TCP (equivalent to the claimed handshaking protocol and TCP is a reliable stream protocol); see column 5, line 40, Elg. Plus, Elg also teaches how the host computer sends device type information to the driver source, wherein the driver source can be the peripheral itself; see column 4, lines 13-15 and column 5, lines 16-20, Elg.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Pleso (US Patent No: 6,009,480).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AZIZUL CHOUDHURY whose telephone number is (571)272-3909. The examiner can normally be reached on M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571) 272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Azizul Choudhury/
Examiner, Art Unit 2445